

## CLAIMS

### WHAT IS CLAIMED IS:

1. An open bronchoscopy oxygenation system comprising,
  - a) an orifice for receiving oxygen joined with,
  - b) a reservoir housing containing a pressure relief valve, to prevent excessive oxygen pressure,
  - c) a stopcock attached to a passage for receiving oxygen and attached to a second passage for receiving an instrument, and with the stopcock being supplied with a handle controlling the flow through the internal passages, thus allowing for the passage of oxygen and/or an instrument through said passages, and
  - d) with the stopcock being attached to a passage running from said stopcock allowing for the passage of either oxygen, an instrument or fluids to a patient such that the patient may be safely treated.
2. The open bronchoscopy oxygenation system of claim 1 wherein there is a pressure relief vent provided between the orifice for receiving oxygen and said pressure relief valve.
3. The open bronchoscopy oxygenation system of claim 1 wherein the stopcock is supplied with a handle and a stop-tab arrangement wherein the stopcock can be turned in a direction allowing for passage of oxygen or the passage of an instrument.

4. A method of performing bronchoalveolar lavage in a patient employing an open bronchoscopy oxygenation system comprising,
  - a) an orifice for receiving oxygen joined with,
  - b) a reservoir housing containing a pressure relief valve, to prevent excessive oxygen pressure,
  - c) a stopcock attached to a passage for receiving oxygen and attached to a second passage for receiving an instrument, and with the stopcock being supplied with a handle controlling the flow through the internal passages, thus allowing for the passage of oxygen and/or an instrument through said passages, and
  - d) with the stopcock being attached to a passage running from said stopcock allowing for the passage of either oxygen, an instrument or fluids to a patient such that the patient may be safely treated.
  - e) with the method steps comprising the steps of supplying oxygen to the patient through said oxygen passage and turning the stopcock and performing bronchoalveolar lavage through said instrument passage.
5. The method of claim 4 wherein the open bronchoscopy oxygenation system is provided with a pressure relief vent between the orifice for receiving oxygen and said pressure relief valve.

6. A method of obtaining a tissue specimen from a patient comprising employing a bronchoscopy oxygenation system comprising,
  - a) an orifice for receiving oxygen joined with,
  - b) a reservoir housing containing a pressure relief valve, to prevent excessive oxygen pressure,
  - c) a stopcock attached to a passage for receiving oxygen and attached to a second passage for receiving an instrument, and with the stopcock being supplied with a handle controlling the flow through the internal passages, thus allowing for the passage of oxygen and/or an instrument through said passages, and
  - d) with the stopcock being attached to a passage running from said stopcock allowing for the passage of either oxygen, an instrument or fluids to a patient such that the patient may be safely treated.
  - e) with the method steps comprising the steps of alternately supplying oxygen to the patient through said oxygen passage and turning the stopcock to perform a biopsy through said instrument passage with a biopsy forcep and in that way preventing hypoxemia in said patient while said tissue specimen is obtained.
7. The method of claim 6 wherein the open bronchoscopy oxygenation system is provided with a pressure relief vent between the orifice for receiving oxygen and said pressure relief valve.

8. A method of suctioning of a patient comprising employing an open bronchoscopy oxygenation system comprising,
- a) an orifice for receiving oxygen joined with,
  - b) a reservoir housing containing a pressure relief valve, to prevent excessive oxygen pressure,
  - c) a stopcock attached to a passage for receiving oxygen and attached to a second passage for receiving an instrument, and with the stopcock being supplied with a handle controlling the flow through the internal passages, thus allowing for the passage of oxygen and/or an instrument through said passages, and
  - d) with the stopcock being attached to a passage running from said stopcock allowing for the passage of either oxygen, an instrument or fluids to a patient such that the patient may be safely treated.
  - e) with the method steps comprising the steps of alternately supplying oxygen to the patient through said oxygen passage and turning the stopcock and performing suctioning through said instrument passage and in that way preventing hypoxemia in said patient while performing suctioning.
9. The method of claim 8 wherein the open bronchoscopy oxygenation system is provided with a pressure relief vent between the orifice for receiving oxygen and said pressure relief valve.